## SONY

# Mini HI-FI Component System

Operating Instructions

MHC-GTZ5 MHC-GTZ4 / GTZ4i MHC-GTZ3 / GTZ3i MHC-GTZ2 / GTZ2i LBT-GTZ4i



## WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc.

Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus. As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet. Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

Excessive sound pressure from earphones and headphones can cause hearing loss. The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off

#### CAUTION

The use of optical instruments with this product will increase eye hazard.

# **Except for the customers** in the United States



This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior

## Notice for the customers in the United States

#### **Owner's Record**

The model and serial numbers are located on the rear of the unit. Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product. Model No. \_\_\_\_\_\_\_Serial No.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The following FCC statement applies only to the version of this model manufactured for sale in the U.S.A. Other versions may not comply with FCC technical regulations.

#### WARNING

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

#### CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

# Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- Do not block any ventilation openings.
   Install in accordance with the
   manufacturer's instructions

- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

# Notice for customers: The following information is only applicable to equipment sold in countries applying EU Directives.

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

#### For customers in Europe



Disposal of Old
Electrical &
Electronic
Equipment
(Applicable in the
European Union
and other European
countries with
separate collection
systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.



Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste.

On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources. In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only.

To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.

For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries.

For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

#### For customers in Australia



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

#### **Note on DualDiscs**

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

# Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

"WALKMAN" and "WALKMAN" logo are registered trademarks of Sony Corporation.

MICROVAULT is a trademark of Sony Corporation.

MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

Windows Media is a registered trademark of Microsoft Corporation in the United States and/or other countries

"Memory Stick" is a trademark of Sony Corporation.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

## About this manual

The instructions in this manual are for models MHC-GTZ5, MHC-GTZ4 / GTZ4i, MHC-GTZ3 / GTZ3i, MHC-GTZ2 / GTZ2i and LBT-GTZ4i. In this manual, the MHC-GTZ5 is used for illustration purposes unless stated otherwise.

#### The MHC-GTZ5 consists of:

HCD-GTZ5 - Unit - Speaker System · Front speakers SS-GTZ5M

#### The MHC-GTZ4 / GTZ4i consists of:

- Unit HCD-GTZ4 / GTZ4i

SS-WGZ5M

 Speaker System European model only

· Subwoofer

· Front speakers SS-GTZ4M Subwoofer SS-WGZ4M Other models

 Front speakers SS-GTZ4 Subwoofer SS-WGZ4

#### The MHC-GTZ3 / GTZ3i consists of:

- Unit HCD-GTZ3 / GTZ3i

 Speaker System Asian models

 Front speakers SS-GTZ3 SS-WGZ4 Subwoofer

European model only (Except United Kingdom model only)

SS-GTZ3M

SS-WGZ3M

 Front speakers Subwoofer Other models

· Front speakers SS-GTZ3 Subwoofer SS-WGZ3

### The MHC-GTZ2 / GTZ2i consists of:

Unit HCD-GTZ2 / GTZ2i

 Speaker System European model only

 Front speakers SS-GTZ3M Other models

 Front speakers SS-GTZ3

#### The LBT-GTZ4i consists of:

- Unit HCD-GTZ4i

- Speaker System

· Front speakers SS-GTZ4A · Subwoofer SS-WGZ3A

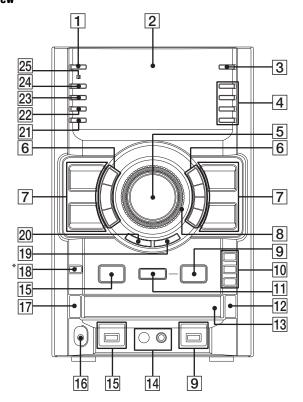
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## **Guide to parts and controls**

This manual mainly explains operations using the unit, but the same operations can also be performed using the buttons on the remote having the same or similar names.

## Unit Front view



<sup>\*</sup> MHC-GTZ5, MHC-GTZ4 / GTZ4i, MHC-GTZ3 / GTZ3i and LBT-GTZ4i only.

1

I/் (on/standby) (pages 16, 39, 45)

Press to turn on the system.

The STANDBY indicator lights up when the system is turned off.

2

Display (page 31)

3

REC TIMER (page 38)

Press to set the Recording Timer.

4

PRESET EQ (pages 30, 35), GROOVE (page 30), SURROUND (page 30) Press to select a sound effect

EQ BAND (page 35)

Press to select the frequency band.

5

MASTER VOLUME (pages 17, 25, 28, 30, 31, 39)

Turn to adjust the volume.

6

\(\tau +/\) (select folder) (pages 17, 26)

Press to select a folder

Hold down to find a point in a track or file.

► (play) (pages 17, 25, 28, 33, 34, 40, 43)

Press to start playback.

II (pause) (pages 17, 26, 29) Press to pause playback.

■ (stop) (pages 17, 22, 26)

Press to stop playback.

TUNING +/- (page 19)

Press to tune in the station you want.

(go back/go forward) (pages 17, 26, 33)

Press to select a track or file.

7

CD (pages 16, 17, 33)

Press to select the CD function.

TUNER/BAND (page 19)

Press to select the TUNER function. Press to select the FM or AM band.

USB (pages 22, 23, 25, 26, 33) Press to select the USB function.

PC (pages 22, 30)

Press to select the PC function.

8

OPERATION DIAL (pages 18, 23, 26, 31, 34, 35, 38)

Turn to select a setting in the OPTIONS menu.

Turn to select a track, file or folder.

9

USB B (pages 20, 27, 28, 33)

Press to select the USB device connected to the ← B port.

← B indicator

Lights up in red when transferring to the connected optional USB device.

← B port (pages 20, 25, 28, 37, 41, 42)

Connect and transfer to an optional USB device.

10

DISC 1 - 3 (pages 17, 33)

Press to select a disc. Press to switch to the CD function from other function

Continued  $\rightharpoonup$ 

11

#### REC TO USB (pages 21)

Press to transfer onto the connected optional USB device which is connected to the  $\leftrightarrow$  B port.

12

▲ OPEN/CLOSE (pages 16, 17, 40)

Press to insert or eject a disc.

13

Disc tray (pages 17, 45)

14

MIC jack (page 36)

Connect an optional microphone.

MIC LEVEL (page 36)

Turn to adjust the microphone volume.

15

USB A (pages 20, 27, 28, 33)

A indicator

← A port (pages 25, 28, 42)

Connect an optional USB device.

16

PHONES jack

Connect the headphones.

17

DISC SKIP/EX-CHANGE (pages 16, 18)

Press to select a disc during CD tray open. Press to exchange other discs during playback. 18

MHC-GTZ5, MHC-GTZ4 / GTZ4i, MHC-GTZ3 / GTZ3i and

LBT-GTZ4i only

SUBWOOFER (page 30)

Press to turn on and off the subwoofer. The SUBWOOFER indicator lights up when the subwoofer is turned on.

19

ENTER (pages 21, 31, 33, 34, 35, 45) Press to enter the settings.

20

RETURN (pages 18, 26)

Press to return to the parent folder. Press to exit search mode

21

ERASE (page 26)

Press to erase audio files and folders from the connected optional USB device.

22

OPTIONS (pages 23, 31)

Press to change the display, USB and MP3 BOOSTER+ settings.

23

METER MODE (page 32)

Press to select the preset meter display.

24

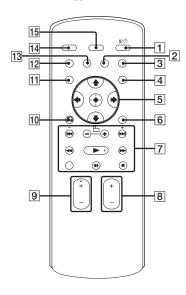
DISPLAY (pages 16, 31, 35, 39)

Press to change the information on the display.

25

Remote sensor (page 40)

## Remote RM-AMU054 (MHC-GTZ4i / GTZ3i / GTZ2i and LBT-GTZ4i only)



1

/\tilde() (on/standby) (page 16)

Press to turn on the system.

2

EQ (page 30, 35)

Press to select a preset EQ effect.

3

DISC SKIP/USB SELECT (pages 17, 27, 33)

Press to select a disc.

Press to select the USB device connected to the USB A or B port.

4

TIMER MENU (pages 16, 37, 38)

Press to set the clock and the timers.

5

### 

Press to select menu items of the system and iPod.

### (pages 16, 33, 37)

Press to enter the setting and select the content.

6

#### **TOOL MENU**

Press to return to previous menu of the iPod.

7

I◀◀ /▶►I (go back/go forward) (pages 17, 26, 33)

Press to select a track or file.

= +/- (select folder) (pages 17, 26)

Press to select a folder.

#### +/- (tuning) (page 19)

Press to tune in the station you want.

# √►► (rewind/fast forward) (pages 17, 26)

Press to find a point in a track or file.

► (play) (pages 17, 25, 28, 33, 34, 40, 43)

Press to start playback.

## CLEAR (page 34)

Press to delete the last step from the program list.

II (pause) (pages 17, 26, 29) Press to pause playback.

■ (stop) (pages 17, 19, 22, 26)

Press to stop playback.

8

FUNCTION +/- (pages 19, 22, 23, 25, 26, 30, 33)

Press to select a function.

9

VOLUME +/-\* (pages 17, 19, 25, 28, 30, 37)

Press to adjust the volume.

\* The VOLUME + button has a tactile dot. Use the tactile dot as a reference when operating the system.

10

#### ♂ RETURN (pages 18, 26)

Press to return to the parent folder. Press to exit search mode.

Press to return to previous menu of the iPod.

11

#### TUNER MEMORY (page 34)

Press to preset the radio station.

12

# PLAY MODE/TUNING MODE (pages 19, 27, 33, 34)

Press to select the play mode of an AUDIO CD, MP3 disc or an optional USB device

Press to select the tuning mode.

13

## REPEAT/FM MODE (pages 17, 20, 26)

Press to listen to a disc, an USB device, a single track or file repeatedly.

Press to select the FM reception mode (monaural or stereo).

14

## SLEEP (page 36)

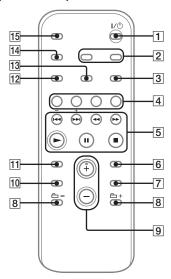
Press to set the Sleep Timer.

15

## DISPLAY (pages 16, 31, 35, 39)

Press to change the information on the display.

# Remote RM-AMU053 (Other models)



1

I/் (on/standby) (pages 16, 37)
Press to turn on the system.

2

CLOCK/TIMER SELECT (pages 38, 45)

CLOCK/TIMER SET (pages 16, 37) Press to set the clock and the timers.

3

# REPEAT/FM MODE (pages 17, 20, 26)

Press to listen to a disc, an USB device, a single track or file repeatedly.

Press to select the FM reception mode (monaural or stereo).

4

USB (pages 22, 23, 25, 26, 33) Press to select the USB function.

CD (pages 16, 17, 33)

Press to select the CD function.

#### TUNER/BAND (page 19)

Press to select the TUNER function. Press to select the FM or AM band.

FUNCTION (pages 22, 30)

Press to select a function.

5

**I I** (go back/go forward) (pages 16, 17, 26, 33, 37)

Press to select a track or file.

√►► (rewind/fast forward)
(pages 17, 26)

Press to find a point in a track or file.

+/- (tuning) (page 19)

Press to tune in the station you want.

► (play) (pages 17, 25, 28, 33, 34, 40, 43)

Press to start playback.

II (pause) (pages 17, 26, 29)

Press to pause playback.

■ (stop) (pages 17, 19, 22, 26) Press to stop playback.

6

ENTER (pages 16, 33, 37)

Press to enter the settings.

7

DISC SKIP/USB SELECT (pages 17, 27, 33)

Press to select a disc

Press to select the USB device connected to the USB A or B port.

8

+/- (select folder) (pages 17, 26)

9

VOLUME +/-\* (pages 17, 19, 25, 28, 30, 37)

Press to adjust the volume.

\* The VOLUME + button has a tactile dot. Use the tactile dot as a reference when operating the system.

10

EQ (page 30, 35)

Press to select a preset EQ effect.

11

CLEAR (page 34)

Press to delete the last step from the program list.

12

TUNER MEMORY (page 34)

Press to preset the radio station.

13

PLAY MODE/TUNING MODE (pages 19, 27, 33, 34)

Press to select the play mode of an AUDIO CD, MP3 disc or an optional USB device.

Press to select the tuning mode.

14

DISPLAY (pages 16, 31, 35, 39)

Press to change the information on the display.

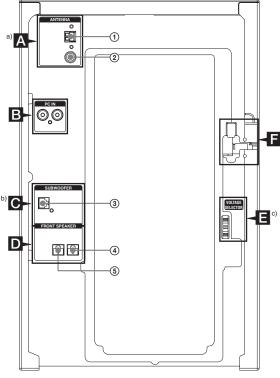
15

SLEEP (page 36)

Press to set the Sleep Timer.

## **Getting Started**

## Hooking up the system securely

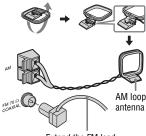


- 1 To AM loop antenna
- ② To FM lead antenna
- (3) To subwoofer
- 4 To front speaker (left)
- (5) To front speaker (right)

- $^{\rm a)}$  The FM 75  $\Omega$  COAXIAL jack varies according to models.
- b) MHC-GTZ5, MHC-GTZ4 / GTZ4i, MHC-GTZ3 / GTZ3i and LBT-GTZ4i only.
- c) The VOLTAGE SELECTOR varies according to models.

## **A** Antennas

Find a location and an orientation that provide good reception, and then set up the antennas.



Extend the FM lead antenna horizontally

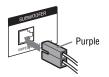
Keep the antennas away from the speaker cords, the power cord and the USB cable to avoid picking up noise.

## **B** PC IN L/R jack

Use an audio cord (not supplied) to connect the audio output of the optional audio component to these jacks. You can then output audio through this system.

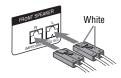
## Subwoofer (MHC-GTZ5, MHC-GTZ4 / GTZ4i, MHC-GTZ3 / GTZ3i and LBT-GTZ4i only)

Be sure to insert the connector straight into the terminals.



## **D** Front speakers

Be sure to insert the connector straight into the terminals.



## **I** VOLTAGE SELECTOR

For models with a voltage selector, set VOLTAGE SELECTOR to the local power line voltage.

## Power

Connect the power cord to a wall socket. The demonstration appears in the display. If the plug does not fit the wall socket, detach the supplied plug adaptor (only for models equipped with an adaptor).

## Attaching the speaker pads

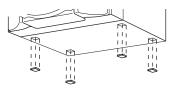
Attach the supplied speaker pads to the bottom of the front speakers and subwoofer to prevent slipping.

#### Front speakers:

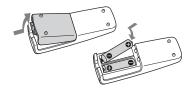
4 pads for each speaker

#### Subwoofer:

4 pads (MHC-GTZ5, MHC-GTZ4 / GTZ4i, MHC-GTZ3 / GTZ3i and LBT-GTZ4i only)



## **Using the remote**



#### Notes

- Do not mix an old battery with a new one or mix different types of batteries.
- If you do not use the remote for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.

#### When carrying the unit

Do the following procedure to protect the disc mechanism.

Use the buttons on the unit for the operation.

- 1 Press I/ b to turn on the system.
- 2 Press CD.
- 3 Press OPEN/CLOSE to open the disc tray and remove the disc.
- 4 Press OPEN/CLOSE again to close the disc tray. Wait until "CD NO DISC" appears in the display.
- 5 Hold down DISC SKIP/ EX-CHANGE and then press I/ Until "STANDBY" appears in the display. Then, "MECHA LOCK" appears in the display.
- 6 Unplug the AC power cord.

## Setting the clock

You cannot set the clock in Power Saving Mode.

Use the buttons on the remote for this operation.

- 1 Press I/ to turn on the system.
- 2 Press CLOCK/TIMER SET (RM-AMU053) or TIMER MENU (RM-AMU054).

If "PLAY SET" appears on the display, press I◀◀/▶► (RM-AMU053) or ♠/♣ (RM-AMU054) repeatedly to select "CLOCK SET" and then press ENTER (RM-AMU053) or ⊕ (RM-AMU054).

- 3 Press I◄◄/▶►I (RM-AMU053) or ↑/▼ (RM-AMU054) repeatedly to set the hour, and then press ENTER (RM-AMU053) or ⊕ (RM-AMU054).
- 4 Use the same procedure to set the minutes.

The clock settings are lost when you disconnect the power cord or if a power failure occurs.

## To display the clock when the system is turned off

Press DISPLAY repeatedly until the clock is displayed. The clock is displayed for a few seconds.

## **Basic Operations**

## Playing an AUDIO CD/ MP3 disc

1 Press CD.

2 Press ■ OPEN/CLOSE.



To place additional discs, slide the disc tray with your finger as shown above. To close the disc tray, press ♠ OPEN/CLOSE on the unit again.

Do not forcibly push the disc tray to close it as this may damage the unit.

#### **CAUTION**

DO NOT place a disc here, as it may cause the system to malfunction.

The disc tray cannot be opened during USB transferring and erasing.



3 Press ➤ to start playback.

4 Turn MASTER VOLUME (or press VOLUME +/- on the remote) to adjust the volume.

## Other operations

То	Do this
Pause playback	Press II. To resume play, press the button again.
Stop playback	Press ■.
Select a folder on an MP3 disc	Press +/- repeatedly.
Select a track or file	Press  or  or  or  or  or  or  or  or  or
Find a point in a track or file <sup>1)</sup>	Hold down ► or ► I ► (or ► / ► or the remote) during playback, and release the button at the point you want.
Playback all the tracks or files on the disc(s) or in the folder <sup>2)</sup> repeatedly <sup>3)</sup> (Repeat Play)	Press REPEAT on the remote repeatedly during playback until "REP" lights up in the display.
Playback a single track or file repeatedly <sup>4)</sup> (Repeat Play)	Press REPEAT on the remote repeatedly during playback until "REP 1" lights up in the display.
Select a disc	Press one of the DISC $1 \sim 3$ buttons (or DISC SKIP on the remote repeatedly).

То	Do this
Search for an MP3 file by its folder name and file name and start playback the MP3 file (TRACK SEARCH)	1 Turn OPERATION DIAL to select the folder you want, then press ENTER. 2 Turn OPERATION DIAL to select the file you want, then press ENTER.
	To return to the parent folder, press RETURN.
Switch to CD function from another source and start playback automatically	Press one of the DISC 1 – 3 buttons (Automatically Source Selection).
Exchange other discs while playing	Press DISC SKIP/ EX-CHANGE.

<sup>1)</sup> The elapsed playing time may not be displayed correctly depending on the MP3 files.

<sup>2)</sup> When "□" or "□ SHUF" is selected for MP3 files.

## To change the play mode

Press PLAY MODE on the remote repeatedly when playback is stopped. You can select the following play mode.

Select	To play back
ALL DISC (Normal Play)	The tracks or files on all discs in original order.
1 DISC (Normal Play)	The tracks or files on the disc you have selected in original order.

Select	To play back
(Normal Play)	The MP3 files in the folder on the disc you have selected in original order.  For AUDIO CDs, this play mode performs the same operation as "1 DISC" play mode.
ALL DISC SHUF* (Shuffle Play)	The tracks or files on all discs in random order.
1 DISC SHUF* (Shuffle Play)	The tracks or files on the disc you have selected in random order.
SHUF* (Shuffle Play)	The MP3 files in the folder on the disc you have selected in random order.  For AUDIO CDs, this play mode performs the same operation as "1 DISC SHUF" play mode.
PGM (Program Play)	The tracks or files on all disc in the order you want them to be played back (see "Creating your own program" on (page 33)).

<sup>\*</sup> Each time you perform Shuffle Play, the playing order may differ. If you turn off the system in shuffle play mode, the system changes the play mode back to normal play mode.

### Notes on playing discs

- The following discs/situations can increase the time it takes to start playback:
  - a disc recorded with a complicated tree structure.
  - a disc recorded in Multi Session.
  - when the files in another folder have just been played back.
- Do not save other types of files or unnecessary folders on an MP3 disc.
- The system can only play MP3 files that have a file extension of ".mp3".

<sup>3)</sup> Playback repeatedly until you stop it. You cannot select "REP" and "ALL DISC SHUF" at the same time.

<sup>4)</sup> A track or file is played back repeatedly until you stop playback.

- · The system can recognize up to
  - 999 folders (including root folder).
  - 999 MP3 files.
  - 150 MP3 files on a single folder.
  - 8 folder levels (tree structure of files).
- Compatibility with all MP3 encoding/writing software, recording device, and recording media cannot be guaranteed. Incompatible MP3 discs may produce noise or interrupted audio or may not play at all.
- The disc will not play if it has not been correctly finalized.
- · CD-TEXT information is not supported.

#### Notes on playing multisession discs

- This system can play back Multi Session discs when an MP3 file is contained in the first session. Any subsequent MP3 files recorded in later sessions can also be played back.
- If the first session is recorded in AUDIO CD format, only the first session will be played back.

## Listening to the radio

Use buttons on the remote for the operation.

1 Select "FM" or "AM".

Press TUNER/BAND (RM-AMU053) or press FUNCTION +/- (RM-AMU054) repeatedly.

- 2 Press TUNING MODE repeatedly until "AUTO" lights up in the display.
- 3 Tune in the station you want.

Scanning stops automatically when a station is tuned in, and then "TUNED" and "ST" (for stereo programs only) light up in the display.

You can also use TUNING +/- on the unit.



#### Note

If "TUNED" does not light up and scanning does not stop, see "To tune in a station with a weak signal" below.

4 Press VOLUME +/- to adjust the volume.

## To stop automatic scanning

Press .

# To tune in a station with a weak signal

Use buttons on the remote for the operation.

- 1 Press TUNING MODE repeatedly until "AUTO" and "PRESET" disappear from the display.
- 2 Press +/- repeatedly to tune in the station you want.

You can also use TUNING +/- on the unit.

# To reduce static noise on a weak FM stereo station

Press FM MODE on the remote repeatedly until "MONO" lights up in the display. There will be no stereo effect, but the reception will improve.

# Transferring onto an USB device

You can transfer music from a sound source to an optional USB device by connecting it to the & B port on the unit. The audio format of files transferred by

For transferring from USB A to USB B you can also transfer WMA and AAC file.

When transferring from audio files, the

this system is MP3.

When transferring from audio files, the file size is the same as the original file.

See "Compatible USB devices with this system" (page 52) for a list of USB devices that can be connected to this system.

(MHC-GTZ4i / GTZ3i / GTZ2i and LBT-GTZ4i only)

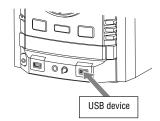
You cannot transfer the music to the iPod which is connected to the ← B port.

USB transferring and erasing is disabled while the disc tray is open.

## **CD-USB Synchronized Transfer**

You can easily transfer an entire disc onto an USB device.

1 Connect a transferable USB device to the ← B port as shown below.



When the USB cable connection is necessary, connect the USB cable supplied with the USB device to be connected

Refer to the operating instructions supplied with the USB device to be connected for details on the operation method.

- 2 Press CD, then load the disc you want to transfer.
- 3 Press PLAY MODE on the remote repeatedly in stop mode to select the play mode.

The play mode automatically changes to normal play mode, if you start transferring in shuffle play mode, repeat play mode or in program play mode (when no tracks or MP3 files are programmed).

For details about the play mode, see "To change the play mode" (page 18).

## 4 Press REC TO USB.

"SYNC" lights up and "REC" flashes in the display.

"PUSH ENTER" appears in the display.

## **5** Press ENTER.

Transferring starts when "DON'T REMOVE" appears in the display. When the transferring is completed, the disc and the USB device stop automatically.

## Transferring a single track or MP3 file during playback (REC1 Transferring)

You can easily transfer the track or MP3 file that is currently being played back onto an USB device.

1 Connect a transferable USB device to the ← B port on the unit (page 20).

- 2 Press CD, then load the disc you want to transfer.
- 3 Select the track or MP3 file you want to transfer, then start play.
- 4 Press REC TO USE while the selected track or MP3 file is being played back.

"REC" flashes in the display.
"PUSH ENTER" appears in the display.

## **5** Press ENTER.

Transferring starts from the beginning of the track or file when "DON'T REMOVE" appears in the display. When the transferring is completed, the disc continues to play.

## Transferring from a sound source other than disc and USB device (Analog Transferring)

You can transfer just the portion you want from a sound source, including connected audio components.

- 1 Connect a transferable USB device to the ← B port on the unit (page 20).
- 2 Press the function button to select the source you want to transfer.
- 3 Press REC TO USB on the unit.

"REC" flashes in the display.
"PUSH ENTER" appears in the display.

## 4 Press ENTER.

Transferring starts when "DON'T REMOVE" appears in the display.

5 Start playback the source.

## To stop transferring

Press .

#### To create a new MP3 file

Press REC TO USB .

"NEW TRACK" appears in the display. If you press REC TO USB again after a few seconds, a new MP3 file cannot be created

# To transfer sound from a microphone

- 1 Press PC (or press FUNCTION (RM-AMU053) or FUNCTION +/- (RM-AMU054) on the remote repeatedly until PC function is selected).
- 2 Press REC TO USB.
- 3 Press ENTER.
- **4** Start singing or speaking into the microphone.

#### Note

When a new MP3 file is created, transferring is disabled for the time being.

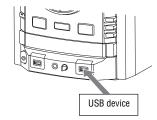
#### Tips

- If distortion happen during transferring, reduce the microphone level.
- A new MP3 file is created automatically after approximately 1 hour of transferring.
- Transferring stops automatically when you change the function or tuner band.

## USB-USB Synchronized Transfer

You can easily transfer the audio files from an USB device to another USB device.

1 Connect a transferable USB device to the ← B port as shown below, then connect the USB device you want to transfer to ← A port.



Press USE (Press USB (RM-AMU053) or press FUNCTION +/- (RM-AMU054) repeatedly on the remote) to select the USB function.

Press USB SELECT on the remote repeatedly to select "USB A".

3 Press PLAY MODE on the remote repeatedly in stop mode to select the play mode.

The play mode automatically changes to 1 USB if you start transferring in ALL USB, ALL USB SHUF, 1 USB SHUF or PGM mode (when no file is programmed).

The play mode automatically changes to  $\Box$  if you start transferring in  $\Box$  SHUF mode.

For details about the play mode, see "To change the play mode" (page 27).

## 4 Press REC to USB.

"SYNC" lights up and "REC" flashes in the display.

"PUSH ENTER" appears in the display.

## **5** Press ENTER.

Transferring starts when "DON'T REMOVE" appears in the display. When the transferring is completed, both USB device stop automatically.

## Transferring a single audio file during playback from an USB device to another USB device (USB-USB REC1 Transferring)

You can easily transfer the audio file on an USB device that is currently being played back onto another USB device.

- 1 Connect a transferable USB device to the ← B port on the unit.
- 2 Press USB (Press USB (RM-AMU053) or press FUNCTION +/- (RM-AMU054) repeatedly on the remote), then connect the USB device you want to transfer to the ← A port.
- 3 Select the audio file you want to transfer, then start play.
- 4 Press REC TO USE while the selected audio file is being played back.

"REC" flashes in the display.
"PUSH ENTER" appears in the display.

## **5** Press ENTER.

Transferring starts from the beginning of the file when "DON'T REMOVE" appears in the display. When the transferring is completed, the audio file continues to play.

#### Note

(MHC-GTZ4i / GTZ3i / GTZ2i and LBT-GTZ4i only)

You cannot transfer the audio files from the iPod which is connected to the ← A port.

## To select the playback source or transferring destination on the Sony Ericsson mobile phone (W302, W595, W760i, W890i, W902, W910i only)

When listening to music from a Sony Ericsson mobile phone or when transferring music from this system to the mobile phone, you can select the playback source or transferring destination as follows:

- internal memory of the mobile phone.
- Memory Stick
- 1 Connect the mobile phone to the

  ← B port on the unit and press

  USB B.
- 2 Press OPTIONS on the unit in stop mode.
- 3 Turn OPERATION DIAL to select "USB MEM SEL".
- 4 Press ENTER.

The memory number of the mobile phone appears in the display but varies depending on the specification of the mobile phone.

You can select a Memory Stick when the selected memory number is as follows:

Model Name	Memory Number
W302	1
W595	2
W760i	2
W890i	2
W902	2
W910i	2

- **5** Turn OPERATION DIAL to select the memory you want.
- 6 Press ENTER.
- 7 Start playback of the audio files in the selected memory of the mobile phone or start transferring.

#### Folder and file generation rules

When transferring to an USB device, a "MUSIC" folder is created directly below the "ROOT". Folders and files are generated within this "MUSIC" folder as follows according to the transferring method and source.

#### CD-USB Synchronized Transfer<sup>1)</sup>

Transfer- ring source		File name
	Same as the transferring source <sup>2)</sup>	
AUDIO CD	"CDDA0001"3)	"TRACK001" <sup>4)</sup>

#### **REC1 Transferring**

Transfer- ring source	Folder name	File name
MP3	"REC1-MP3" <sup>5)</sup>	Same as the transferring source <sup>2)</sup>
AUDIO CD	"REC1-CD",5)	"TRACK001",4)

#### Analog Transferring

Transfer- ring source		File name
FM	"TUFM0001"3)	"TRACK001"4)
AM	"TUAM0001",3)	
PC	"EXPC0001"3)	

## USB A - USB B Transferring1)

Transferring source	Folder name	File name
	Same as the transource <sup>2)</sup>	nsferring

- 1) In Program Play mode, the folder name is "PGM\_xxxx", and the file name depends on the transferring source (AUDIO CD or MP3 disc).
- 2) Up to 32 characters of the name are assigned.
  3) Folder numbers are assigned serially
- <sup>4)</sup> File numbers are assigned serially thereafter.
- 5) A new file is transferred in the "REC1-CD" or "REC1-MP3" folder each time REC1-CD or REC1-MP3 Transferring is performed.

#### Notes

- Do not connect the system and the USB device through an USB hub.
- When transferring from an AUDIO CD, the tracks are transferred as 128 kbps MP3 files.
   When transferring from an MP3 disc, MP3 files are transferred with the same bit rate as the original MP3 files.
- When transferring from a USB device, the audio files are transferred with the same bit rate as the original audio files.
- When transferring from TUNER and PC function, the music are transferred as 128 kbps MP3 files.
- The approximate size of transferred MP3 files on an USB device will be about 50 MB when music is transferred from a standard AUDIO CD. It will take about 3 minutes to transfer these MP3 files from the USB device connected to ← A port to another USB device connected to ← B port.
- While transferring from an MP3 disc, AUDIO CD or USB device, no sound is output.
- CD-TEXT information is not transferred in the created MP3 files.

- · Transferring stops automatically if:
  - the USB device runs out of space during transferring.
- the number of audio files and folders on the USB device reaches the limit for the number that the system can recognize.
- the function or tuner band is changed.
- The maximum number of audio files and folders may vary depending on the audio file and folder structure.
- If a folder or file that you are trying to transfer already exists on the USB device with the same name, a sequential number is added after the name without overwriting the original folder or file.
- Do not remove the USB device during transferring or erase operations. Doing so may corrupt the data on the USB device or damage the USB device itself.
- You cannot eject the disc, select another disc, track or file, pause playback or find a point in the track or file during CD-USB
- Synchronized Transfer or REC1 Transferring.

   When playing files on the USB device right
- when playing files on the USB device right after USB transfer, the first-recorded file on the device is played back.
- Depending on the transferring method, the transferring progress shown on the display may vary (1 track/file/folder).

# Listening to music of an USB device

You can listen to music stored in the USB device.

The audio formats that can be played back by this system are MP3, AAC and WMA only.\*

See "Compatible USB devices with this system" (page 52) for a list of USB devices that can be connected to this system.

- \* Files with copyright protection (Digital Rights Management) cannot be played back by this system. Files downloaded from an online music store may not be played back on this system. An AAC file which has video stream cannot be played back.
- 1 Press USB (Press USB (RM-AMU053) or press FUNCTION +/- (RM-AMU054) repeatedly on the remote).
- 2 Connect an optional USB device to the ← A or ← B port on the unit, and press either USB A or USB B.

When the USB device is connected, the display changes as follows:

"READING" → "xxx FOLDER"\*

\* Number of folders is displayed in "xxx".

#### Note

It may take some time before "READING" appears depending on the type of USB device connected.

3 Press ►.

The audio files are played in alphabetical order.

4 Turn MASTER VOLUME (or press VOLUME +/- on the remote) to adjust the volume.

Continued  $\Longrightarrow$ 

# To erase audio files or folders from the USB device

You can erase audio files or folders from the USB device.

- 1 Connect a transferable USB device to the ← A or ← B port on the unit.
- 2 Press USB and select USB A or USB B (Press USB (RM-AMU053) or press FUNCTION +/- (RM-AMU054) repeatedly on the remote) in stop mode.
- 3 Press I ← ← ← or ► I ► ← (or I ← / ► I ← on the remote) or □ + / ← repeatedly to select the audio file or folder you want to erase.
- 4 Press ERASE.

  "TRACK ERASE" or "FOLDER
  ERASE", and "PUSH ENTER" appear
  alternately in the display.

  To cancel the erase operation, press ■.
- Fress ENTER.The selected audio file or folder is erased."COMPLETE" appears in the display.

## Other operations

То	Do this
Pause playback	Press II. To resume playback, press the button again.
Stop playback	Press ■. To resume playback, press ■. ¹) To cancel resume play, press ■ twice and check that "RESUME" disappears from the display.
Select a folder	Press +/- repeatedly.

То	Do this
Select a file	Press   d d or   or   on the remote) repeatedly.
Search for an audio file by its folder name and file name and start playback the audio file (TRACK SEARCH)	1 Turn OPERATION DIAL to select the folder you want, then press ENTER. 2 Turn OPERATION DIAL to select the file you want, then press ENTER.
	To return to the previous operation, press RETURN.
Find a point in a file	Hold down I ◀ ◀ or ►I► (or ◀ / ► ) on the remote) during playback, and release the button at the point you want.
Playback all the files on the USB device or in the folder <sup>2)</sup> repeatedly <sup>3)</sup> (Repeat Play)	Press REPEAT on the remote repeatedly during playback until "REP" lights up in the display.
Playback a single file repeatedly <sup>3)</sup> (Repeat Play)	Press REPEAT on the remote repeatedly during playback until "REP 1" lights up in the display.

То	Do this
Select USB device	Press USB A to select the USB device which is connected to the ← A port.  Press USB B to select the USB device which is connected to the ← B port.  Press USB SELECT on the remote repeatedly to select the USB A or USB B which is connected to the ← A or ← B port.
Switch to USB function from another source and start playback automatically	Press USB A or USB B (Automatic Source Selection).

<sup>1)</sup> When playing an VBR (variable bit rate) audio file, the system may resume playback from a different point.

### To change the play mode

Press PLAY MODE on the remote repeatedly when playback is stopped. You can select the following play mode.

Select	To play back
ALL USB (Normal Play)	The audio files on all USB devices in original order.
1 USB (Normal Play)	The audio files on the USB device you have selected in original order.
(Normal Play)	The audio files in the folder on the USB device you have selected in original order.
ALL USB SHUF* (Shuffle Play)	The audio files on all USB devices in random order.

Select	To play back
1 USB SHUF* (Shuffle Play)	The audio files on the USB device you have selected in random order.
SHUF* (Shuffle Play)	The audio files in the folder on the USB device you have selected in random order.
PGM (Program Play)	The tracks or files on all disc in the order you want them to be played back (see "Creating your own program" on (page 33).

\* Each time you perform Shuffle Play, the playing order may differ. If you turn off the system in shuffle play mode, the system changes the play mode back to normal play mode.

#### Notes on the USB device

- You cannot change the play mode during playback.
- Some time may be needed to start playback when:
  - the folder structure is complex.
  - the memory capacity is excessive.
- When the USB device is connected, the system reads all the files on the USB device.
   If there are many folders or files on the USB device, it may take a long time to finish reading the USB device.
- Do not connect the system and the USB device through an USB hub.
- With some connected USB devices, after an operation is performed, there may be a delay before it is performed by this system.
- This system does not necessarily support all the functions provided in a connected USB device.
- The playback order for the system may differ from the playback order of the connected digital music player.
- Be sure to turn off the system before removing the USB device.
  - Removing the USB device while the system is turned on may corrupt the data on the USB device.

Continued \_\_\_\_

<sup>2)</sup> When "\(\bigcap\)" or "\(\bigcap\) SHUF" is selected.
3) Playback repeatedly until you stop it.

- Do not save other types of files or unnecessary folders on an USB device.
- Folders that have no audio files are skipped.
- · The system can recognize up to
  - 1000 folders (including "ROOT" and "MUSIC" folder).
  - 3000 audio files.
  - 150 audio files on a single folder.
- 8 folder levels (tree structure of files).
   The maximum number of audio files and folders may vary depending on the file and folder structure.
- The system can play the following format of audio files:
  - MP3 with file extension ".mp3".
  - AAC with file extension ".m4a", ".3gp", ".mp4".
  - Windows Media Audio (WMA) with file extension ".wma".

If the audio files have the above file extension but are not the respective formats, the system may produce noise or may malfunction.

- Compatibility with all MP3, AAC or WMA encoding/writing softwares, recording devices, and recording media cannot be guaranteed. Incompatible USB device may produce noise or interrupted audio or may not play at all.
- You cannot erase audio files and folders in shuffle play mode or program play mode.
- If the folder to be erased does not contain MP3/AAC/WMA files or contains sub folders, these are not erased.

## Playing the iPod

# (MHC-GTZ4i/GTZ3i/GTZ2i and LBT-GTZ4i only)

You can listen to audio contents stored in the iPod on this system.

- 1 Connect the iPod to ← A or ← B port.
- 2 Press USB A or USB B.

"iPod" lights up in the display.



- 3 Press ►.
- 4 Turn MASTER VOLUME (or press VOLUME +/- on the remote) to adjust the volume.

#### Notes

- When you connect an iPod to the unit, the iPod is automatically turned on if the system is turned on.
- Before disconnecting the iPod, pause playback.
- To change the volume level, use VOLUME +/-. The volume level does not change even if adjusted on the iPod.
- To use an iPod, refer to the operating instructions of your iPod.
- Sony cannot accept responsibility in the event that data recorded to iPod is lost or damage when using an iPod with this unit.
- Some iPod operations may not be performed using buttons on the unit or remote.
- Depending on the connected iPod, operations may differ.
- When iPod is selected, you cannot select "REP" or "REP1".
- You only can perform 1 USB normal play mode if iPod is selected.

### Other operations

You can control your iPod with the following buttons on the unit or remote.

То	Do this
Pause playback	Press II during playback.
Scroll up/down the iPod menus	Press <b>♦</b> / <b>♦</b> repeatedly on the remote.
Choose the select item	Press ENTER (or → or ⊕ on the remote).
Select a track or chapter of audiobook/ podcast	Press I ← ← or  ► I ► (or I ← / ► I on the remote) repeatedly.
Fast forward or fast rewind Play	Hold down I ◆ ◆ or ► I ► (or ◆ / ► on the remote) during playback, then release it at the point you want.
Return to the previous menu item	Press TOOL MENU or or RETURN on the remote. You can return to the previous menu or select a menu of the iPod.
	Note You can confirm menu

and item selections on the

iPod screen during

operation.

#### Tip

• The following buttons on the unit or remote have the similar function with the buttons on the iPod (except iPod Touch).

Buttons on the iPod
which have similar function
►II
I <b>⊲</b> or ▶►I
MENU
Center button.

# To use the system as a battery charger

You can use the system as a battery charger for the iPod when the system is on.

The charging begins when the iPod is connected to the USB ports. The charging status appears in the iPod screen. For details, see the operating instructions of your iPod.

## To stop charging the iPod

Remove the iPod. When the system is turned off, the charging is stopped.

# Using optional audio components

- Connect an optional audio component to the PC IN L/R jacks using an audio cord (not supplied).
- 2 Turn MASTER VOLUME (or press VOLUME on the remote) to turn down the volume.
- **3** Press to select PC function.

Press FUNCTION (RM-AMU053) or FUNCTION +/- (RM-AMU054) repeatedly.

- 4 Start playing the connected component.
- 5 Turn MASTER VOLUME (or press VOLUME +/- on the remote) to adjust the volume.

## **Adjusting the sound**

### To add a sound effect

То	Do this
Reinforce the bass and create a more powerful sound	Press GROOVE repeatedly until "GROOVE" or "Z-GROOVE" lights up in the display.
Select the surround effect	Press SURROUND repeatedly until "SURROUND" lights up in the display.
Select a preset sound effect	Press PRESET EQ (or EQ on the remote) repeatedly. To cancel, press PRESET EQ (or EQ on the remote) repeatedly until "FLAT" appears.
Enhance the sound quality of the audio file <sup>2)</sup>	Press OPTIONS and turn OPERATION DIAL to select "MP3 BOOSTER+", then press ENTER. Turn OPERATION DIAL to select "AUTO", then press ENTER. <sup>3)</sup>

<sup>1)</sup> The volume switches to power mode and the equalizer curve changes.

# To turn on the subwoofer (MHC-GTZ5, MHC-GTZ4 / GTZ4i, MHC-GTZ3 / GTZ3i and LBT-GTZ4i only)

Press SUBWOOFER repeatedly until the SUBWOOFER indicator on the unit lights up. If you later disconnect the subwoofer, repeat the procedure until the SUBWOOFER indicator on the unit lights off. The volume of the subwoofer is linked to the front speakers.

<sup>2)</sup> This feature is only available during USB and CD function.

<sup>3) &</sup>quot;BOOSTER" lights up in the display when the MP3 BOOSTER+ effect is activated.

## **Changing the display**

1 Press OPTIONS.

2 Turn OPERATION DIAL to select the item you want.

#### ILLUM

Change the power illuminator pattern around MASTER VOLUME.

#### M-BACKLIGHT (Meter backlight)

Change the Meter Backlight pattern.

#### MTR POINTER (Meter pointer)

Change the Meter Pointer pattern.

#### **DISPLAY** (Front panel display)

Change the front panel display pattern.

- 3 Press ENTER.
- 4 Turn OPERATION DIAL to select the setting you want, then press ENTER.
- 5 Repeat steps 2 through 4 to make other settings.

## To exit the OPTIONS menu

Press OPTIONS again.

## To return to the previous display

Press RETURN.

## Changing the display mode

Press DISPLAY repeatedly while the system is turned off.

#### Demonstration

The display changes and the indicator flashes even when the system is turned off.

#### No display (Power Saving mode)

The display is turned off to conserve power. The timer and clock continue to operate. You cannot turn on the system by pressing the function buttons.

#### Clock

The clock is display.

The clock display automatically turns to Power Save Mode after a few seconds.

# Changing information in the display

# Press DISPLAY repeatedly when the system is turned on.

You can view the elapsed playing time and remaining playing time during playback and total playing time during stop mode for AUDIO CD.

For audio files, you can view the elapsed playing time, the file and folder names. You can also view the title, artist and album information that is stored in the files

#### Notes on the display information

- Characters that cannot be displayed appear as
- The following are not display correctly:
  - elapsed playing time of an audio file
  - encoded using a VBR (variable bit rate).

     folder and file names that do not follow
- folder and file names that do not follow either the ISO9660 Level 1, Level 2 or Joliet in the expansion format.
- The ID3 tag information for MP3 files is displayed when ID3 Version 1(1.0/1.1) and Version 2(2.2/2.3) tags are used (ID3 version 2 tag information display has priority when both ID3 version 1 and version 2 tags are used for a single MP3 file).

## **Using the Meter Display**

You can easily view the information through the meter display such as the music source level.

## Press METER MODE repeatedly to select a preset display pattern.

The power illuminator, meter backlight display, meter pointer display and front panel display will change according to the preset display pattern you have selected.

## Other Operations

## Creating your own program

- Program Play
- 1 Select the function you want.

#### **CD** function

Press CD to select CD function. (Press CD (RM-AMU053) or press FUNCTION +/- (RM-AMU054) repeatedly to select the CD function on the remote.)

#### **USB** function

Press USB to select USB function. (Press USB (RM-AMU053) or press FUNCTION +/- (RM-AMU054) repeatedly to select the USB function on the remote.)

- 2 Press PLAY MODE on the remote repeatedly in stop mode until "PGM" lights up in the display.
- 3 Select the source you want.

#### **CD** function

Press one of the DISC  $1 \sim 3$  buttons (or DISC SKIP on the remote repeatedly) to select a disc.

#### **USB** function

Press USB A/B (or USB SELECT on the remote repeatedly) to select the optional USB device connected on ← A or ← B port.

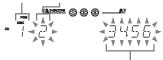
4 (For audio files)
Press FOLDER +/- repeatedly
until the folder you want appears
in the display.

To program all the audio files in the selected folder, process to step 6.

## **5** Select a track or file to program.

Press I◀◀ ◀◀ or ▶▶I▶▶

Disc tray Selected track or file number number



Total playing time of program (including selected track or file)

# 6 Press ENTER (or ① (RM-AMU054) on the remote).

The track(s), file(s) or folder(s) is(are) programmed.

The programmed step number appears in the display.

# 7 To program additional folders, tracks or files.

To program	Repeat steps
Other tracks or files on the same disc/USB device	4 to 6
Other tracks or files on other discs USB device	3 to 6
Other files on same folder	5 and 6
Other files on other folder	4 to 6

## 8 Press ►.

Program Play starts.

# To program a track or file by using OPERATION DIAL

- **1** Perform step 1 to 3 of "Creating your own program".
- 2 For audio files only Turn OPERATION DIAL to select the folder you want, then press ENTER.
- **3** Turn OPERATION DIAL to select the track or file you want.
- 4 Press ENTER. The program step number appear in the display.

## Other operations

То	Do this
Cancel Program Play	When playback is stopped, press PLAY MODE on the remote repeatedly until "PGM" disappear from the display.
Delete the last step from the program list	Press CLEAR on the remote when playback is stopped.

#### Notes

(For CD function only)

 The program list is cleared when you eject the disc.

(For USB function only)

- · The program list is cleared when you:
  - perform the erase operation.
  - remove the USB device from the
    ← A port or ← B port.
  - switch the USB memory select.

#### Tips

- The program you made remains in the system's memory even after it has been played back. Press 
   to play back the same program again.
- If "----" appears instead of the total playing time during programming, this means:
  - the total playing time has exceeded 100 minutes.
  - you have programmed an audio file.
  - the current disc is DATA-CD or USB.

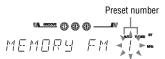
# Presetting radio stations

You can preset your favorite radio stations and tune them in instantly by selecting the corresponding preset number.

Use the buttons on the remote for this operation.

- 1 Tune in the station you want (see "Listening to the radio" (page 19)).
- **2** Press TUNER MEMORY.

A preset number flashes in the display. The stations are stored from preset number 1.



3 Press +/- repeatedly to select the preset number you want.

If another station is already assigned to the selected preset number, the station is replaced by the new station.

- 4 Press ENTER (RM-AMU053) or ⊕ (RM-AMU054).
  - "COMPLETE" appears in the display. The station is stored.
- 5 Repeat steps 1 through 4 to store other stations.

You can preset up to 20 FM and 10 AM stations.

To call up a preset radio station, press TUNING MODE repeatedly until "PRESET" lights up in the display, and then press +/- repeatedly to select the preset number you want.

## Using the Radio Data System (RDS)

(European model only)

### What is the Radio Data System?

Radio Data System (RDS) is a broadcasting service that allows radio stations to send additional information along with the regular program signal. This tuner offers convenient RDS features such as station name. RDS is available only on FM stations.\*

#### Note

RDS may not work properly if the station you are tuned in is not transmitting the RDS signal properly or if the signal is weak.

\* Not all FM stations provide RDS service, nor do they provide the same type of services. If you are not familiar with the RDS system, check with your local radio stations for details on RDS services in your area.

# Receiving RDS broadcasts Simply select a station from the FM band.

When you tune in a station that provides RDS services, the station name appears in the display.

## To check the RDS information While receiving an RDS station, press DISPLAY repeatedly.

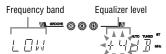
RDS information appears on the display.

## Creating your own sound effect

You can raise or lower the levels of specific frequency ranges and then store up to the user equalizer in the memory.

1 Press EQ BAND repeatedly to select a frequency band and then turn OPERATION DIAL to adjust the equalizer level.

Repeat this for each band you want to adjust.



# 2 Press ENTER (RM-AMU053) or (\*) (RM-AMU054).

"USER EQ" appears and the setting is stored in the memory.

## To call up the user equalizer setting

Press PRESET EQ (or EQ on the remote) repeatedly until "USER EQ" appears.

## To cancel the sound effect

Press PRESET EQ (or EQ on the remote) repeatedly until "FLAT" appears.

## Singing along

You can sing along with any audio source that play back on this system.

- Turn MIC LEVEL to MIN to turn down the microphone volume level.
- 2 Connect an optional microphone to the MIC jack on the unit.
- 3 Start playing the music.
- 4 Turn MIC LEVEL to adjust the microphone volume.

If acoustic feedback (howling) occurs, reduce the volume, move the microphone away from the speakers, or change the direction of the microphone.

After you have finished, disconnect the microphone from the MIC jack on the unit.

## **Using the Timers**

The system offers three timer functions. You cannot activate both the Play Timer and the Recording Timer at the same time. If you use either with the Sleep Timer, the Sleep Timer has priority.

## **Sleep Timer**

You can fall asleep to music. This function works even if the clock is not set.

# Press SLEEP on the remote repeatedly.

Each time you press the button, the minute display (the turn-off time) changes cyclically as follows:

90MIN → 80MIN → 70MIN → ...
→ 10MIN → OFF

### Other operations

То	Do this
Check the remaining time	Press SLEEP once.
Change the time to turn off	Press SLEEP repeatedly to select the time you want.
Cancel the Sleep Timer	Press SLEEP repeatedly until "SLEEP OFF" appears in the display.

#### **Play Timer/Recording Timer**

Make sure you have set the clock. Use the button on the remote for the operation.

#### Play Timer:

You can wake up to disc, tuner or optional USB device at a preset time.

#### **Recording Timer:**

You can transfer music from a preset radio station into an USB device at a specified time.

#### 1 Prepare the sound source.

#### **Play Timer**

Prepare the sound source, and then press VOLUME +/- to adjust the volume.

To start from a specific track or file, create your own program (page 33).

#### **Recording Timer**

Tune in the preset radio station (page 34).

- 2 Press CLOCK/TIMER SET (RM-AMU053) or TIMER MENU (RM-AMU054).
- 3 Press I◀◀ / ▶► I (RM-AMU053) or ▼ / ♠ (RM-AMU054) repeatedly to select "PLAY SET" or "REC SET", and then press ENTER (RM-AMU053) or ⊕ (RM-AMU054).

"ON" appears, and the hour indication flashes.

### 4 Set the time to start playing or transferring.

Press ► (RM-AMU053) or ↑/♠ (RM-AMU054) repeatedly to set the hour, and then press ENTER (RM-AMU053) or ⊕ (RM-AMU054). The minute indication flashes. Use the procedure above to set the minutes.

- 5 Use the same procedure as in step 4 to set the time to stop playing or transferring.
- **6** Select the sound source or prepare the USB device.

#### **Play Timer**

Press ► (RM-AMU053) or ↑/↑ (RM-AMU054) repeatedly until the sound source you want appears, and then press ENTER (RM-AMU053) or ⊕ (RM-AMU054). The display shows the timer settings.

#### **Recording Timer**

Connect a transferable USB device to the B port on the unit. The display shows the timer settings.

7 Press I/ $^{\circ}$  to turn off the system.

### To set the Recording Timer using the controls on the unit (REC TIMER)

- 1 Tune in the preset station (page 34).
- 2 Press REC TIMER.
  "ON" appears, and the hour indication flashes
- 3 Turn OPERATION DIAL to set the hour, then press ENTER. The minute indication flashes. Use the procedure above to set the minutes.
- 4 Use the same procedure as in step 3 to set the time to stop recording. The display shows the timer settings.
- 5 Connect a transferable USB device to the ← B port on the unit.
- **6** Press **1**/**b** to turn off the system.

#### To activate or check the timer again

#### Unit:

Press REC TIMER, turn OPERATION DIAL until "REC SELECT" appears, and then press ENTER.

#### RM-AMU053:

Press CLOCK/TIMER SELECT, press I◄◄/▶► repeatedly until "PLAY SELECT" or "REC SELECT" appears, and then press ENTER.

#### RM-AMU054:

Press TIMER MENU to select "TIMER SELECT", then press ⊕. Press ♥/♠ repeatedly until "PLAY SELECT" or "REC SELECT" appears, and then press ⊕.

#### To cancel the timer

Repeat the same procedure as above until "TIMER OFF" appears, and then press ENTER (RM-AMU053 or on the unit) or (†) (RM-AMU054).

#### To change the setting

Start over from step 1.

#### **Tips**

- The system turns on before the preset time. If the system is turned on at the preset time or if "STANDBY" flashes in the display, the Play Timer and the Recording Timer will not play or transfer
- The Play Timer setting remains as long as the setting is not canceled manually.
- The volume is reduced to minimum during the Recording Timer.
- The Recording Timer is canceled automatically after the Recording Timer has been activated.
- The Play Timer may not be activated depending on the status of the connected iPod.
- Be sure that the iPod is not playing when using the Play Timer.

#### Additional Information

### **Troubleshooting**

Should you encounter a problem with your system, do the following:

- Make sure the power cord and speaker cords are correctly and firmly connected.
- 2 Find your problem in the checklist below, and take the indicated corrective action.

If the problem persists, contact your nearest Sony dealer.

Note that if service personnel changes some parts during repair, these parts may be retained.

#### When the I/(I) indicator flashes

Immediately unplug the power cord, and check the following items.

- If your system has a voltage selector, is the voltage selector set to the correct voltage?
- Are you using only the supplied speakers?
- Are the + and speaker cords shortcircuited?
- Is anything blocking the ventilation holes of the unit?

After checking the above items and fixing any problems, plug in the power cord again and turn on the system. If the STANDBY indicator still flashes, or if the cause of the problem cannot be found even after checking all the above items, consult your nearest Sony dealer.

#### General

# The display starts flashing as soon as you plug in the power cord even though you have not turned on the system.

 Press DISPLAY once while the system is turned off. The demonstration disappears.

#### The clock or timer setting is canceled.

 The power cord is disconnected or a power failure occurred. Redo "Setting the clock" (page 16). If you have set the timer, redo "Using the timer" (page 36).

#### "--:--" appears in the display.

- The clock is not set. Set the clock (page 16).
- A power failure has occurred. Set the clock (page 16) and timer settings (page 36) again.

#### There is no sound.

- Turn MASTER VOLUME clockwise (or press VOLUME + repeatedly on the remote).
- The headphones are connected to the PHONES jack.
- Check the speaker connections (page 15).
- There is no audio output during Recording Timer.

### There is no sound from the subwoofer

• Check that the subwoofer is connected securely and correctly to the unit.

#### There is no microphone sound.

- Turn MASTER VOLUME clockwise (or press VOLUME + repeatedly on the remote) or turn MIC LEVEL clockwise to adjust the microphone volume.
- Make sure the microphone is connected to the MIC jack correctly.

#### Sound comes from one channel, or the left and right volumes are unbalanced.

- Place the speakers as symmetrically as possible.
- Connect only the supplied speakers.

#### There is severe hum or noise.

- A TV or VCR is placed too close to the unit. Move the unit away from the TV or VCR.
- Move the unit away from the source of noise.
- · Connect the unit to a different wall outlet
- Install a noise filter (commercially
- available) to the power cord. Turn off surrounding electrical equipment.

#### The timer does not function.

- Check the timer setting and set the correct time (page 36).
- Cancel the Sleep Timer function (page 36).
- · You cannot select the Play Timer and the Recording Timer at the same time.

#### The remote does not function.

- · Remove the obstacles between the remote and the unit.
- Move the remote closer to the unit.
- Point the remote at the unit's sensor.
- Replace the batteries (R6/size AA).
- · Move the unit away from the fluorescent light.

#### There is acoustic feedback.

- Reduce the volume.
- Move the microphone away from the speakers or change the direction of the microphone.

#### Disc player

#### The disc tray does not open and "LOCKED" appears in the display.

· Consult your nearest Sony dealer or local authorized Sony service facility.

#### The disc tray does not close.

- · Load the disc correctly.
- Always close the disc tray by pressing ▲ OPEN/CLOSE. Do not forcibly push the disc tray to close it as this may cause a malfunction.

#### The disc does not eject.

- You cannot eject the disc during CD-USB Synchronized Transfer, or REC1 Transferring. Press ■ to cancel the transferring, then press OPEN/CLOSE to eject the disc.
- · Consult your nearest Sony dealer.

#### Playback does not start.

- · Open the disc tray and check whether a disc is loaded.
- Wipe the disc clean (page 47).
- · Reload the disc.
- Load the disc that this system can play back (page 47).
- · Load the disc on the disc tray with the label side facing up.
- · Remove the disc and wipe away the moisture on the disc, then leave the system turned on for a few hours until the moisture evaporates.
- Press 
   to start playback.

#### The sound skips.

- Wipe the disc clean (page 47).
- Reload the disc.
- Move the unit to place without vibration (e.g., on top of a stable stand).
- Move the speakers away from the unit, or place them on seperate stands. When you listen to a track with bass sounds at high volume, the speaker vibration may cause the sound to skip.

### Playback does not start from the first track.

 The system is in Program Play or Shuffle Play mode. Press PLAY MODE on the remote repeatedly until "ALL DISC", "1 DISC" or "\(\boxed{\to}\)" lights up in the display.

#### The MP3 file cannot be played back.

- The MP3 file is not recorded in a format that conforms to ISO9660 Level 1/ Level 2, or Joliet (expansion format).
- The MP3 file does not have the extension ".mp3".
- The MP3 file in format other than MPEG 1 Audio Layer 3 cannot be played back.
- The system can play back to a depth of 8 folders only.
- The disc contains more than 999 folders.
- The disc contains more than 999 MP3 files
- MP3 files in MP3 PRO format cannot be played back.

### The MP3 files take a longer time to play back than others.

- After the system reads all the files on the disc, playback may take more time than usual if:
  - the number of folders or files on the disc is very large.
  - the folder and file organization structure is very complex.

# The folder name, track name, file name and ID3 tag characters do not appear properly.

- Use a disc that conforms to ISO9660 Level 1/Level 2, or Joliet (expansion format).
- The ID3 tag is not Version 1(1.0/1.1) and Version 2(2.2/2.3).
- The character code that can be displayed by this system are as follows:
  - Upper cases (A to Z)
  - Numbers (0 to 9)
  - Symbols (<> \* +, ? / [ ] \ \_)
    Other characters may not be disp

Other characters may not be displayed correctly.

#### **USB** device

### You cannot start transferring to an USB device.

- The following problems may have occurred.
  - The USB device is full.
  - The number of audio files and folders on the USB device has reached the upper limit.
  - The USB device is write-protected.
  - The USB device is not connected to the ← B port.

### Transferring is stopped before it is finished.

- You are using an unsupported USB device. See "Compatible USB devices with this system" (page 52) for the supported device types.
- The USB device is not formatted correctly. Refer to the USB device operating instruction on how to format.
- Turn off the system and remove the USB device. If the USB device has a power switch, turn the USB device off and then on again after removing it from the system. Then perform transferring again.
- If the transferring and erase operations are repeated multiple times, the file structure within the USB device becomes complex. Refer to the USB device operating instruction on how to deal with this problem.

### Transferring to an USB device results in an error.

- You are using an unsupported USB device. See "Compatible USB devices with this system" (page 52) for the supported device types.
- The USB device was disconnected or the power was turned off during transferring. Delete the partiallytransferred file, and transfer again. If this does not fix the problem, the USB device may be broken. Refer to the USB device operating instruction on how to deal with this problem.
- Turn off the system and remove the USB device. If the USB device has a power switch, turn the USB device off and then on again after removing it from the system. Then perform transferring again.

### Audio files or folders on the USB device cannot be erased.

- Check if the USB device is writeprotected.
- The USB device was disconnected or the power was turned off during the erase operation. Delete the partiallyerased file. If this does not fix the problem, the USB device may be broken. Refer to the USB device operating instruction on how to deal with this problem.

### Are you using a supported USB device?

- If you connect an unsupported USB device, the following problems may occur. See "Compatible USB devices with this system" (page 52) for the supported device types.
  - The USB device is not recognized.
  - File or folder names are not displayed on this system.
  - Playback is not possible.
  - The sound skips.
  - There is noise.
  - A distorted sound is output.
  - Transferring stops before it is finished.

#### "OVER CURRENT" appears.

A problem has been detected with the level of electrical current from the ← A port or ← B port. Turn off the system and remove the USB device from the ← A port or ← B port. Make sure there is no problem with the USB device. If this display pattern persists, contact your nearest Sony dealer.

#### There is no sound.

The USB device is not connected correctly. Turn off the system and reconnect the USB device, then turn on the system and check if "USB A" or "USB B" lights up in the display.

### There is noise, skipping, or distorted sound.

- Turn off the system and reconnect the USB device, then turn on the system.
- The music data itself contains noise, or the sound is distorted. Noise may have entered during the transferring process.
   Delete the file, and try transferring again.

## The USB device cannot be connected into the ← A port or ← B port.

 The USB device is being connected backwards. Connect the USB device in the correct orientation.

# "READING" is displayed for an extended time, or it takes a long time before playback starts.

- The reading process can take a long time in the following cases.
  - There are many folders or files on the USB device.
  - The file structure is extremely complex.
  - The memory capacity is excessive.
  - The internal memory is fragmented.
     Thus, we recommend following these guidelines.
  - Total folders on USB device: 1000 or less
  - Total files per folder: 150 or less
  - Total files on USB device: 3000 or

#### Erroneous display.

- The data stored in the USB device may have been corrupted, perform the transferring again.
- The character code that can be displayed by this system are as follows:
  - Upper cases (A to Z)
  - Numbers (0 to 9)
  - Symbols (<> \* +, ? / [ ] \ \_)
     Other characters may not be displayed correctly.

#### The USB device is not recognized.

- Turn off the system and reconnect the USB device, then turn on the system.
- Connect the supported USB device (page 52).
- The USB device does not work properly. Refer to the USB device operating instruction on how to deal with this problem.

#### Play does not start.

- Turn off the system and reconnect the USB device, then turn on the system.
- Connect the supported USB device (page 52).
- Press ► to start play.

#### Play does not start from the first file.

· Set the play mode to normal play mode.

#### Audio file cannot be played back.

- MP3 files in MP3 PRO format cannot be played back.
- Some AAC files may not be played back correctly.
- WMA files in Windows Media Audio Lossless and Professional format cannot be played back.
- USB device formatted with file systems other than FAT16 or FAT32 are unsupported.\*
- In case multiple partitions exist in USB device that is being used, files may not be played.
- Playback is possible up to 8 levels.
- The number of folders has exceeded 1000.
- The number of files in a folder has exceeded 150.
- The number of files in a USB device has exceeded 3000.
- Files that are encrypted or protected by passwords, etc. cannot be played back.
- \* This system supports FAT16 and FAT32, but some USB device may not support all of these FAT. For details, refer to the operating instruction of each USB device or contact the manufacturer

#### iPod

#### There is no sound.

- Make sure the iPod is connected securely.
- Make sure the iPod is playing music.
- · Adjust the volume.
- Depending on the contents of the iPod, it may take time to start playback.
- You are using an unsupported iPod. See "Compatible iPod models with this system" (page 54) for the supported device types.

#### The sound is distorted.

- · Reduce the volume.
- Set the "EQ" setting of the iPod to "Off" or "Flat".

#### The iPod can not be charged.

 Make sure the iPod is connected securely.

#### Tuner

# Severe hum or noise, or stations cannot be received. ("TUNED" or "ST" flashes on the display.)

- · Connect the antenna properly.
- Find a location and an orientation that provide good reception, and then set up the antenna again.
- Keep the antennas away from the speaker cords, the power cord and the USB cable to avoid picking up noise.
- Connect a commercially available external antenna.
- Consult your nearest Sony dealer if the supplied AM antenna has come off the plastic stand.
- Turn off nearby electrical equipment.

### A stereo FM program cannot be received in stereo.

 Press FM MODE on the remote repeatedly until "MONO" disappears from the display.

#### Meter

#### Meter pointer does not move.

- "MTR POINTER" is set to "OFF" in the OPTIONS menu. Select other settings.
- Meter mode is set to "METER OFF".
   Press METER MODE on the unit repeatedly to select other modes.
- The headphones are connected to the PHONES jack. Disconnect the headphones.

#### Meter display is turned off.

- "MTR POINTER" and "M-BACKLIGHT" are set to "OFF" in the OPTIONS menu. Select other settings.
- Meter mode is set to "METER OFF".
   Press METER MODE on the unit repeatedly to select other modes.

#### Meter display is flashing.

- "MTR POINTER" and "M-BACKLIGHT" are set to "FLASH" in the OPTIONS menu. Select other settings.
- Meter mode is set to "EXCITE 1" or "EXCITE 2". Press METER MODE on the unit repeatedly to select other modes.

#### **Optional components**

#### There is no sound.

- Refer to General item "There is no sound." (page 42) and check the condition of the system.
- Connect the component properly (page 14) while checking:
  - if the cords are connected properly.
  - if the cord plugs are firmly inserted all the way.
- Turn on the connected component.
- Refer to the operating instructions supplied with the connected component and start playing.

### To change the AM tuning interval (except for European models)

The AM tuning interval is factory-preset to 9 kHz (or 10 kHz, for some areas). You cannot change the AM tuning interval in Power Saving Mode.

Use the buttons on the unit for this operation.

- 1 Select the AM band, and then turn off the system.
- 2 While holding down ENTER, press 1/1.

The system turns on automatically and "AM 9K STEP" or "AM 10K STEP" appears.

All the AM preset stations are erased. To reset the interval to the factory preset, repeat the procedure.

### To reset the system to factory settings

If the system still does not operate properly, reset the system to factory settings. You cannot reset the system to factory settings in Power Saving Mode.

- Disconnect and reconnect the power cord, and then turn on the system.
- 2 Press ■, ENTER, and I/ at the same time.

"COLD RESET" appears in the display.

All user-configured settings, such as preset radio stations, timer, and the clock, are reset to factory setting.

### Messages

One of the following messages may appear or flash in the display during operation.

#### **Disc/Timer**

**LOCKED:** The disc tray does not open. Contact your nearest Sony dealer.

**NO DISC:** There is no disc on the disc tray or you have loaded a disc that cannot be played back on this system.

**NO STEP:** All of the programmed steps have been erased.

**NOT IN USE:** You have pressed a button those operation is not allowed or invalid at this time.

**OFF TIME NG:** The Play Timer or Recording Timer start and stop times are set to the same time.

**PUSH SELECT:** You tried to set the clock or timer during timer operation.

**PUSH STOP:** You tried to perform an operation that can be performed only when the system is stopped.

**READING:** The system is reading information of the disc. Some buttons are not available.

**SET CLOCK:** You pressed CLOCK/ TIMER SELECT (RM-AMU053) before the clock is set.

SET TIMER: You pressed CLOCK/ TIMER SELECT (RM-AMU053) before the Play Timer or Recording Timer is set

**STEP FULL:** You tried to program more than 25 steps.

**UNLOCK:** The disc theft-preventive function is released.

#### **USB** device

- **DATA ERROR:** You tried to play a file that is not playable.
- **DEVICE ERROR:** The USB device could not be recognized or an unknown device is connected (page 42).
- **DEVICE FULL:** The memory of the USB device is full.
- **FATAL ERROR:** The USB device was removed during transferring or erase operation, and may have been damaged.
- **FOLDER FULL:** You cannot transfer onto the USB device because the number of folders have reached its maximum.
- **NO DEVICE:** The USB device is not connected.
- **NO MEMORY:** External device is not inserted in mobile phone.
- **NO STEP:** All of the programmed steps have been erased.
- **NO TRACK:** No playable file is loaded in the system.
- **NOT IN USE:** You tried to perform a specific operation under conditions where that operation is prohibited.
- NOT SUPPORTED: An unsupported USB device is connected, or the USB device is connected to this system through a hub.

- **OVER CURRENT:** An over current was detected.
- **PROTECTED:** The USB device is write-protected.
- **PUSH STOP:** You tried to perform an operation that can be performed only when the system is stopped.
- **READING:** The system is reading information of the USB device. Some buttons are not available.
- **REC ERROR:** Transferring did not start, stopped partway, or otherwise could not be performed (page 41).
- **STEP FULL:** You tried to program more than 25 steps.
- **TRACK FULL:** You cannot transfer onto the USB device because the number of files have reached its maximum.

#### **Precautions**

#### Discs that this system CAN play

- · AUDIO CD
- · CD-R/CD-RW (audio data/MP3 files)

#### Discs that this system CANNOT play

- · CD-ROM
- CD-R/CD-RW other than those recorded in AUDIO CD format or MP3 format conforming to ISO9660 Level 1/Level 2, Joliet in the expansion format
- CD-R/CD-RW recorded in multisession that have not ended by "closing the session"
- CD-R/CD-RW of poor recording quality, CD-R/CD-RW that have scratches or are dirty, or CD-R/CD-RW recorded with an incompatible recording device
- CD-R/CD-RW which is finalized incorrectly
- Discs containing files other than MPEG 1 Audio Layer-3 (MP3) files
- Discs of non-standard shape (for example, heart, square, star)
- Discs that have adhesive tape, paper, or sticker attached to them
- Rental or used discs with attached seals where the glue extends beyond the seal
- Discs that have labels printed using ink that feels tacky when touched

#### Notes on discs

- Before playing, wipe the disc with a cleaning cloth from the center out to the edge.
- Do not clean discs with solvents, such as benzine thinner, or commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose discs to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.

#### On safety

- The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.
- Completely disconnect the power cord (mains lead) from the wall socket (mains) if it is not going to be used for an extended period of time. When unplugging the unit, always grip the plug. Never pull the cord itself.

- Should any solid object or liquid get into the system, unplug the system, and have it checked by qualified personnel before operating it again.
- AC power cord must be changed only at the qualified service shop.

#### On placement

- Do not place the system in an inclined position or in locations that are extremely hot, cold, dusty, dirty, or humid or lacking adequate ventilation, or subject to vibration, direct sunlight or a bright light.
- Be careful when placing the unit or speakers on surfaces that have been specially treated (for example, with wax, oil, polish) as staining or discoloration of the surface may result.
- If the system is brought directly from a cold to a warm location or is placed in a very damp room, moisture may condense on the lens inside the unit, and cause the system to malfunction. In this situation, remove the disc, and leave the system turned on for about an hour until the moisture evaporates.

#### On heat buildup

- Heat buildup on the unit during operation is normal and is not a cause for alarm.
- Do not touch the cabinet if it has been used continuously at a high volume because the cabinet may have become hot.
- · Do not obstruct the ventilation holes.

#### On the speaker system

This speaker system is not magnetically shielded, and the picture on nearby TV sets may become magnetically distorted. In this situation, turn off the TV, wait 15 to 30 minutes, and turn it back on. If there is no improvement, move the speakers far away from the TV.

#### Cleaning the cabinet

Clean this system with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as thinner, benzine, or alcohol

### **Specifications**

#### **AUDIO POWER SPECIFICATION**

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: (LBT-GTZ4i only)

With 6 ohm loads, both channels driven, from 120 Hz – 10 kHz; rated 110 watts per channel minimum RMS power, with no more than 0.7% total harmonic distortion from 250 miliwatts to rated output.

#### **Amplifier section**

#### MHC-GTZ5

The following are measured at Mexican model:

AC 127 V, 60 Hz

European model:

AC 230 V, 50 Hz

Other models:

AC 120, 220, 240 V, 50/60 Hz

Front speaker

Power output (rated): 110 W + 110 W (at 6  $\Omega$ , 1 kHz, 1% THD)

RMS output power (reference):

200 W + 200 W (per channel at 6  $\Omega$ , 1 kHz. 10% THD)

Subwoofer

RMS output power (reference): 200 W (at 6  $\Omega$ , 100 Hz, 10% THD)

### MHC-GTZ4 / GTZ4i Brazilian model only

The following are measured at AC 127 or 220~V~60~Hz

Front speaker

RMS output power (reference): 155 W + 155 W (per channel at 6  $\Omega$ , 1 kHz. 10% THD)

Subwoofer

RMS output power (reference): 150 W (at 6  $\Omega$ , 100 Hz, 10% THD)

#### Other models

The following are measured at

Mexican model:

AC 127 V, 60 Hz

European model:

AC 230 V, 50 Hz

Other models:

AC 120, 220, 240 V, 50/60 Hz

Front speaker

Power output (rated): 90 W + 90 W

(at 6  $\Omega$ , 1 kHz, 1% THD)

RMS output power (reference):

155 W + 155 W (per channel at 6  $\Omega$ , 1 kHz, 10% THD)

Subwoofer

RMS output power (reference): 150 W (at 6  $\Omega$ , 100 Hz, 10% THD)

#### MHC-GTZ3 / GTZ3i

#### Brazilian model only

The following are measured at AC 127 or 220 V 60 Hz

Front speaker

RMS output power (reference):

135 W + 135 W (per channel at 6  $\Omega$ , 1 kHz, 10% THD)

Subwoofer

RMS output power (reference): 130 W (at 6  $\Omega$ . 100 Hz. 10% THD)

#### Other model

The following are measured at

Mexican model:

AC 127 V, 60 Hz

European model:

AC 230 V, 50 Hz

Other models:

AC 120, 220, 240 V, 50/60 Hz

Front speaker

Power output (rated): 75 W + 75 W

(at 6 Ω, 1 kHz, 1% THD)

RMS output power (reference): 135 W + 135 W (per channel at 6  $\Omega$ ,

1 kHz, 10% THD)

Subwoofer

RMS output power (reference): 130 W (at 6  $\Omega$ , 100 Hz, 10% THD)

#### MHC-GTZ2 / GTZ2i Brazilian model only

The following are measured at AC 127 or 220 V 60 Hz

RMS output power (reference): 130 W + 130 W (per channel at 6  $\Omega$ , 1 kHz. 10% THD)

#### Other models

The following are measured at

Mexican model:

AC 127 V, 60 Hz

European model:

AC 230 V, 50 Hz

Other models:

AC 120, 220, 240 V, 50/60 Hz

Front speaker

Power output (rated): 60 W + 60 W (at  $6 \Omega$ , 1 kHz, 1% THD) RMS output power (reference): 100 W + 100 W (per channel at  $6 \Omega$ , 1 kHz, 10% THD)

#### LBT-GTZ4i

The following are measured at AC 120 V  $60\,\mathrm{Hz}$ 

Front speaker

RMS output power (reference): 185 W + 185 W (per channel at 6  $\Omega$ , 1 kHz. 10% THD)

Subwoofer

RMS output power (reference): 180 W (at 6  $\Omega$ , 100 Hz, 10% THD)

#### Inputs

PC (AUDIO IN) L/R:

Voltage 700 mV

impedance 47 kilohms

MIC: sensitivity 1 mV, impedance

10 kilohms

← (USB) port: Type A

#### Outputs

PHONES: accepts headphones of 8  $\Omega$  or

more

FRONT SPEAKER: accepts impedance

of 6  $\Omega$ 

SUBWOOFER (MHC-GTZ5, MHC-GTZ4/GTZ4i, MHC-GTZ3 / GTZ3i and LBT-GTZ4i only): accepts impedance of 6  $\Omega$ 

#### **USB** section

Supported bit rate

MP3 (MPEG 1 Audio Layer-3):

32 – 320 kbps, VBR WMA: 48 – 192 kbps

AAC: 48 – 320 kbps

Sampling frequencies

MP3 (MPEG 1 Audio Laver-3):

32/44.1/48 kHz

WMA: 44.1 kHz

AAC: 44.1 kHz

Transfer speed

Full-Speed

Supported USB device

Mass Storage Class

Maximum current

500 mA

#### Disc player section

System

Compact disc and digital audio system

Laser Diode Properties

Emission Duration: Continuous

Laser Output\*: Less than 44.6 µW

\* This output is the value measurement

at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.

Frequency response

20 Hz – 20 kHz Signal-to-noise ratio

More than 90 dB

Dynamic range

More than 88 dB

Continued ightharpoonup

#### Tuner section

FM stereo, FM/AM superheterodyne tuner

#### FM tuner section

Tuning range:

North American and Brazilian models: 87.5 – 108.0 MHz (100 kHz step)

Other models:

87.5 – 108.0 MHz (50 kHz step)

Antenna: FM lead antenna

Antenna terminals: 75 ohms unbalanced Intermediate frequency: 10.7 MHz

#### AM tuner section

Tuning range

Pan American and Oceanian models:

530 – 1,710 kHz (with 10 kHz tuning interval)

531 - 1,710 kHz (with 9 kHz tuning interval)

European models:

531 - 1,602 kHz (with 9 kHz tuning interval)

Other models:

530 - 1,610 kHz (with 10 kHz tuning interval)

531 – 1,602 kHz (with 9 kHz tuning interval)

Antenna: AM loop antenna, external antenna terminal

Intermediate frequency: 450 kHz

#### iPod section

DC5V 500mA MAX

#### Speakers

#### MHC-GTZ5

Front speaker (SS-GTZ5M)

Speaker system: 3-way, 3-unit, bass reflex

Speaker unit:

Subwoofer: 150 mm, cone type Woofer: 150 mm, cone type

Tweeter: 40 mm, horn type

Rated impedance: 6 ohms

Dimensions (w/h/d) (Approx.):

 $250 \times 391 \times 285 \text{ mm}$ 

Mass (Approx.): 4.9 kg per speaker

Subwoofer (SS-WGZ5M)

Speaker system: 1-unit, bass reflex

Speaker unit:

Woofer: 250 mm, cone type

Rated impedance: 6 ohms

Dimensions (w/h/d) (Approx.):

318 × 391 × 340 mm

Mass (Approx.): 7.9 kg

#### MHC-GTZ4 / GTZ4i

• Front speaker (European model only) (SS-GTZ4M)

Front speaker (Other models) (SS-GTZ4)

Speaker system: 3-way, 3-unit, bass reflex

Speaker unit:

Subwoofer: 130 mm, cone type

Woofer: 130 mm, cone type Tweeter: 40 mm, horn type

Rated impedance: 6 ohms

Dimensions (w/h/d) (Approx.):

 $237 \times 361 \times 240 \text{ mm}$ 

Mass (Approx.): 3.9 kg per speaker

• Subwoofer (European model only)

(SS-WGZ4M) Subwoofer (Other models)

(SS-WGZ4)

Speaker system: 1-unit, bass reflex

Speaker unit:

Woofer: 200 mm, cone type

Rated impedance: 6 ohms

Dimensions (w/h/d) (Approx.):

 $265 \times 361 \times 325 \text{ mm}$ 

Mass (Approx.)

SS-WGZ4M: 5.4 kg

SS-WGZ4: 5.7 kg

#### MHC-GTZ3 / GTZ3i

 Front speaker (European model except United Kingdom only) (SS-GTZ3M)

Front speaker (Other models) (SS-GTZ3)

Speaker system: 2-way, 2-unit,

bass reflex Speaker unit:

Woofer: 160 mm, cone type Tweeter: 40 mm, horn type Rated impedance: 6 ohms

Dimensions (w/h/d) (Approx.):

237 × 361 × 210 mm

Mass (Approx.): 2.9 kg per speaker

• Subwoofer (Asian model only) (SS-WGZ4)

Subwoofer (European model except United Kingdom only)

(SS-WGZ3M)

Subwoofer (Other models)

(SS-WGZ3)

Speaker system: 1-unit, bass reflex

Speaker unit:

Woofer: 200 mm, cone type Rated impedance: 6 ohms Dimensions (w/h/d) (Approx.):

 $265 \times 361 \times 325 \text{ mm}$  Mass (Approx.)

SS-WGZ3/SS-WGZ3M: 5.4 kg SS-WGZ4: 5.7 kg

#### MHC-GTZ2 / GTZ2i

 Front speaker (European model only) (SS-GTZ3M)

Front speaker (Other models) (SS-GTZ3)

Speaker system: 2-way, 2-unit, bass reflex

Speaker unit:

Woofer: 160 mm, cone type Tweeter: 40 mm, horn type Rated impedance: 6 ohms Dimensions (w/h/d) (Approx.):

 $237 \times 361 \times 210 \text{ mm}$ 

Mass (Approx.): 2.9 kg per speaker

#### LBT-GTZ4i

• Front speaker (SS-GTZ4A)

Speaker system: 3-way, 3-unit, bass reflex

Speaker unit:

Subwoofer: 5 inch (130 mm), cone

type

Woofer: 5 inch (130 mm), cone type Tweeter: 1 1/2 inch (40 mm), horn type

Rated impedance: 6 ohms Dimensions (w/h/d) (Approx.):

9 3/8  $\times$  14 1/4  $\times$  9 1/2 inch (237  $\times$ 

 $361 \times 240 \text{ mm}$ 

Mass (Approx.): 8 lb 10 oz (3.9 kg) per

speaker

• Subwoofer (SS-WGZ3A)

Speaker system: 1-unit, bass reflex

Speaker unit:

Woofer: 8 inch (200 mm), cone type

Rated impedance: 6 ohms Dimensions (w/h/d) (Approx.):  $10 \ 1/2 \times 14 \ 1/4 \times 12 \ 7/8 \ inch \ (265 \times 361 \times 325 \ mm)$ 

Mass (Approx.): 11 lb 15 oz (5.4 kg)

#### General

Power requirements

North American model: AC 120 V,

60 Hz

European models: AC 230 V, 50/60 Hz

Oceanian model: AC 230 – 240 V,

50/60 Hz

Mexican model: AC 127 V, 60 Hz

Brazil model: 127 V or 220 V AC, 60 Hz, adjustable with voltage selector Argentine model: AC 220 V, 50/60 Hz Other models: AC 120, 220 or 230 –

240 V, 50/60 Hz, Adjustable with

voltage selector

#### Power consumption

MHC-GTZ5: 250 W

MHC-GTZ4 / GTZ4i: 300 W MHC-GTZ3 / GTZ3i: 280 W

MHC-GTZ3 (Dramilian model)

MHC-GTZ2 (Brazilian model): 200 W MHC-GTZ2 / GTZ2i (Other models):

190 W

LBT-GTZ4i (American model): 240 W

Dimensions (w/h/d) (excl. speakers)

Approx.  $231 \times 361 \times 430.5 \text{ mm}$ (9  $1/8 \times 14 \ 1/4 \times 17 \ 1/4 \text{ inch}$ )

Mass (excl. speakers)

HCD-GTZ5 / GTZ4 / GTZ4i / GTZ3 / GTZ3i: 10.0 kg (22 lb 1 oz)

HCD-GTZ2 / GTZ2i: 8.0 kg

Supplied accessories:

Remote Commander (1)

R6 (Size AA) batteries (2)

AM loop antenna (1)

FM lead antenna (1)

Speaker pads

MHC-GTZ5 / MHC-GTZ4 / GTZ4i / MHC-GTZ3 / GTZ3i / LBT-GTZ4i (12), and MHC-GTZ2 / GTZ2i (8)

Design and specifications are subject to change without notice.

- Standby power consumption: 0.5 W
- Halogenated flame retardants are not used in the certain printed wiring boards.

# Compatible USB devices with this system

You can use the following Sony USB devices and Sony Ericsson mobile phone on this system.

#### **Verified Sony USB device**

Product name	Model name
Walkman <sup>®</sup>	NWD-B103 / B105 / B103F / B105F
	NWD-E023F / E025F
	NWZ-A815 / A816 / A816B / A818
	NWZ-A726 / A726B / A728 / A728B / A729
	NWZ-A826 / A828 / A829
	NWZ-B133 / B135 / B133F / B135F
	NWZ-E435F / E436F / E438F
	NWZ-S515 / S516 / S615F / S616F / S618F / S715F / S716F / S718F
	NWZ-S636F / S638F / S639F / S736F / S738F / S739F
IC Recorder	ICD-UX71 / UX81 / UX91
	ICD-SX700 / SX800 / SX900
MICROVAULT	USM512JX / 1GJX / 2GJX / 4GJX
	USM1GL / 2GL / 4GL / 8GL / 16GL
	USM1GLX / 2GLX / 4GLX / 8GLX / 16GLX

#### **Verified Sony Ericsson mobile phone**

Product name	Model name
Walkman <sup>®</sup> phone	W302 / W350i / W380i / W580i / W595 / W660i
	W710i / W760i / W850i / W880i / W890i
	W902 / W910i / W960i / W980

#### **Notes**

- During playback or transferring of files, there is a small possibility that these operations may be stopped due to excess static buildup in the system or the USB device. In this case, remove the USB device and reconnect it, then retry the operation from the beginning.
- Do not use USB devices other than these USB devices. Operation of models not listed here is not guaranteed.
- Operation may not always be ensured even when using these USB devices.
- Some of these USB devices may not be available for purchase in certain areas.
- When formatting a USB device, be sure to do so using the device itself, or dedicated formatting software for the device. Otherwise, you may be unable to properly transfer from the USB device to this system.

### Notes on using the Sony Ericsson mobile phone

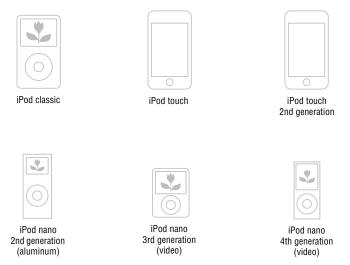
- Connect to this system with the mobile phone turned on.
- While the mobile phone is connected to this system, do not insert or detach the memory card.
- When connecting to this system, set the data transfer mode of your mobile phone to File Transfer (Mass Storage).
   For details, refer to the operating instruction supplied with the mobile phone.
- Use the USB cable supplied with the mobile phone when connecting to the system.
- Some audio files supported by the mobile phone are not surpported by this system.
- In the case that the song which is registered as the playlist in the mobile phone is erased by this system, the playlist registration is not deleted.
- The Play Timer and Rec Timer in this system are not supported.

#### Notes on Walkman®

- Some files supported by the Walkman<sup>®</sup> are not supported by this system.
- When connecting a Walkman® to the system, be sure to connect after the display "Creating Library" or "Creating Database" on the Walkman® has disappeared.

### **Compatible iPod models with this system**

You can use the following iPod models on this system. Update your iPod with the latest software before using it.



#### Notes

- Sony can not accept responsibility in the event that data recorded to iPod is lost or damaged when using an iPod connected to this unit.
- This product has been designed specifically to work with iPod and has been certified to meet Apple performance standards.
- · This unit is not compatible with iPhone.

